

**SOUTH DAKOTA TECHNICAL INSTITUTE
FACILITY PROJECT APPLICATION**

(Use when applying for funds that are bonded through the South Dakota Health & Education Authority)
(Submit one (1) copy each to South Dakota Department of Education &
South Dakota Health & Education Authority)

Institute _Lake Area Technical Institute_____ **Date** _12 February 2008

Project Title/Programs _LATI Campus Plan: Phases I and II (Diesel, Energy Technology, Welding and Automotive Technology

Local Board Approving Resolution __11 February 2008_____ **(Date)**

Anticipated Length of Project _____2_____ **(Number of Years)** March 2008 – June 2010 **(Dates)**

Project Square Footage:

<u>Project</u>	<u>Deisel ,Energy,Tech</u>	<u>Automotive</u>
Sq. Ft.	59,000	23,800

Project Need

1) *Rationale/Intended Use:*

In a recently completed LATI Strategic Campus Plan, an independent Architectural firm cited several findings which included of note:

- The current campus and facilities are inadequate to meet current and long-term needs.
- Facilities are nearly universally heavily utilized or over utilized. Space limitations are beginning to affect the quality of education and leave no room for enrollment growth.

Phases I and II of the LATI Campus Plan replace the classrooms and lab spaces for Diesel and Automotive Technology, double the laboratory space for Welding, and provide laboratory and classroom space for the new Energy Technology program.

-Industry Need:

According to the US Department of Labor Statistics showing 50 Top Occupational Growth in South Dakota over the 2004-2014 timeframe, the following growths are projected for the affected program areas: Diesel Mechanic: 150 replacements plus 18% growth; Welding: 330 new jobs plus replacements; Automotive: 430 replacements plus 17% growth.

Administrative Wage Records indicate 33 percent of manufacturing workers were over 45 years of age, with 69 percent being male. In addition, the renewable energy production industries are booming in South Dakota with several new ethanol plants and wind fields already in construction; there is a proposed construction of a oil pipeline from Canada; Big Stone power plant has proposed a huge expansion; and planned construction of a oil refinery in Elk Point, South Dakota. Besides the demand for highly skills and certified welders during the construction phases, these

plants will need welders on maintenance crews, both at the new plants as well as the replacement of retiring welders from existing plants.

2) Program(s):

Diesel Technology (Phase 1)

Primary Needs: Lake Area Tech turns away potential students as our Diesel Technology program operates at current plant capacity in both the agriculture and long haul truck options. The new Diesel Technology facility not only replaces an outdated facility but also alleviates overcrowding and allows expansion of one of LATI's hallmark programs. Our current facilities limit the height, width, and length of vehicles that can access the building, making LATI unable to provide experiences with an increasing number of large construction and farm machinery as the size of these machines continue to grow. Finally, the project will modernize aging technology and allow for additional safety features in the realm of hoists, ventilation, and lifts. Expansion of program entails increased classroom space as well as lab space.

Energy Technology (Phase 1)

Primary Needs: This proposal addresses the urgently needed expansion of the LATI educational plant needed to meet the exploding need for skilled energy plant maintenance crew members in South Dakota and the region's energy production, construction, and maintenance job sectors. Additionally, the proposal provides key infusions of technology by procuring needed equipment and tools, and enabling the broadening of our curriculum.

Welding Technology (Expansion)(Phase 1)

Primary Needs: Today, LATI's 6400 sq ft welding laboratory enables 62 post-secondary students in three shifts to acquired accredited education in welding technology. Besides graduating approximately 26 students a year with either a diploma or Associates of Applied Science in Welding Technology, the welding program also provides welding education to the other manufacturing programs, such as robotics and energy technology and significant amounts of corporate education. The facility also hosts a secondary welding laboratory which provides introductory training to approximately 160 high school students per year. LATI would significantly increase its capacity to produce degreed (both diploma and Associates in Applied Sciences of Welding Technology) and certified graduates for industry and provide customized continuing education and skills training for industry. All these are required components of addressing the existing and growing shortfalls in skilled welders in South Dakota's manufacturing, energy technology, construction, and maintenance job sectors.

Automotive Technology (Phase 2)

Primary Needs: The new Automotive Technology facility will not only replace a deteriorating facility (currently in a 33+ year old steel building) but will also alleviate overcrowding and allow expansion of LATI's vital program. The project will modernize aging technology and allow for additional safety features in the realm of improved ventilation, improved mechanical/electrical, improved access, CO2 concerns, safety hazard concerns, improved lighting, improved drainage, improved accessibility, improved parking, and noise control. Expansion of program entails increased classroom space as well as lab space.

3) Program(s)Wage/Salary:

	2005 Graduate Wages (surveyed 6 mo after graduation)	2006 Graduate Wages (preliminary data)
Diesel Technology:	\$14.75	\$14.18
Welding Technology:	\$13.30	\$15.27
Energy Technology:	N/A	\$18-\$20 (projected)
Automotive Technology:	\$11.78	\$13.20

4) Program(s) Current and Projected Enrollment-(Current to year 5):

Project	Diesel	Welding	Energy	Automotive
Current	95	45	22	60
Year 1	90	55	44	60
Year 2	100	60	55	75
Year 3	110	60	66	75
Year 4	120	60	77	75
Year 5	130	60	88	75

Note: Corporate Education will also expand offers in these areas

5) Safety Issues

Today, the Diesel and Automotive laboratory facilities are overcrowded. Both the Automotive and Diesel buildings have exceed the 30 year life expectancies of the metal buildings. Water leaks, seepage and other age related problems are becoming safety concerns. Additionally, aging ventilation and heavy lift equipment as well as specialized electrical wiring, needs to be upgraded or replaced. The Energy Technology lab is current under 800 sq ft, significantly short of the needed 8000 sq ft of laboratory space.

6) Additional Project Information

Projected Estimated Cost **\$ __\$13.4M__**

Dollars Requested from Bonding Authority **\$ __\$11M__**

Other Resources for Funding Project **\$ __\$2.4M__**

(In-kind, private contributions, other)

LATI Foundation will be initiating a Major Investment Campaign to raise capital for the project. The Campaigns focus will be on ensuring facilities are technologically up to date with modern safety and efficiency features. A concerted effort is also underway to obtain the next level of excellence funding from Federal and commercial grants.

Location & Legal description of project

(Survey & title commitment)

Phases I and II of the LATI Campus Plan are constructed on existing city or District-owned land, with the exception of a desired option for a portion of the Diesel facility and parking expansion to be built just south of existing campus. Additionally, storage and other temporary transition enabling facilities may also be built on the land if it can be procured. Purchase of that land by LATI is in final negotiations.

Preliminary construction draw-down schedule

Month 1 = 9.09%	\$1,000,000
Month 4 = 16.18%	\$ 780,000
Month 8 = 26.36%	\$1,120,000
Month 12 = 36.55%	\$1,120,000
Month 16 = 60.64%	\$2,650,000
Month 20 = 80.64%	\$2,200,000
Month 24 = 100.00%	<u>\$2,130,000</u>
Total	\$11,000,000

Estimated weighted average useful life of Project

TECHNICAL INSTITUTES SERIES 2008 LAKE AREA TEACHNICAL INSTITUTE

Estimated Schedule of Project Costs and Average Reasonably Expected Economic Life

<u>DESCRIPTION</u>	<u>(A)</u> <u>Total</u> <u>Costs</u>	<u>(B)</u> <u>Paid by</u> <u>Bond</u> <u>Proceeds</u>	<u>(C)</u> <u>Economic</u> <u>Life in</u> <u>Years</u>	<u>(D)</u> <u>Product of</u> <u>(B) * (C)</u>
Building (new)	6,400,000	6,360,000	40	254,400,000
Building (combination)			30	0
Building (remodeling)			20	0
H.V.A.C., fire protection	1,600,000	1,600,000	20	32,000,000
Plumbing	800,000	800,000	20	16,000,000
Electrical	1,400,000	1,400,000	20	28,000,000
Equipment - 8 years	500,000		8	0
Equipment - 10 years	850,000		10	0
Equipment - 15 years	700,000		15	
Professional Services	890,000	589,280	20	11,785,600
Builder's Risk	10,000	9,040	20	180,800
Contingency	250,000	241,680	20	4,833,600
Totals	<u>13,400,000</u>	<u>11,000,000</u>		<u>347,200,000</u>

Average Reasonable Expected Economic Life: Not Less than 31.56 years. (D/B)

31.56

- (1) Computation of economic life as of expected placed in service date does not include period of years (or portion thereof) from the date such assets are expected to be placed in service.
- (2) Facilities given an original economic life of 20 years or longer include only property that constitutes a building or an integral part thereof, which integral part (i) is not removable without damage to such part or the building of which it is a part and (ii) is not to be used with respect to, or designed to permit or facilitate the operation of, any particular piece of equipment or non-real property.
- (3) Estimates only. Architect to be hired after school board approval. Anticipated by mid March. LATI will resubmit with updated information in the August/September timeframe
Building costs include land preparation activities